[SURFACE ISOLATION DEVICE]

Abstract of Disclosure

A surface isolation device for isolating a predetermined area of a second surface of a wafer from an etching solution while the etching solution etches a first surface of the wafer to form a plurality of manifolds in the wafer. The surface isolation device has a base for positioning the wafer, a fixture for fixing the wafer on the base, and an isolation ring positioned on the base for isolating the predetermined area from the etching solution. When the fixture fixes the wafer on the base, the wafer sticks to the isolation ring, forming a seal that isolates the predetermined area from the etching solution.